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# **SECTOR 8**

#### THE SOLOMON ISLANDS—CENTRAL AND WEST PARTS

**Plan.**—This sector describes the islands, reefs, and sounds of the Solomon Group NW of Russell Islands. The arrangement is from SE to NW.

#### **General Remarks**

**8.1** The Solomon Islands are comprised of seven major islands, four of which, Santa Isabel, Choiseul, New Georgia, and Bougainville, are described in this sector.

Santa Isabel (Santa Isabel Island) is separated from Malaita by Indispensable Strait, and from the New Georgia Group by New Georgia Sound (The Slot). Choiseul Island is separated from Santa Isabel by Manning Strait, and from the New Georgia Islands by the continuation of the sound. Bougainville Island, the largest of the Solomon Islands, lies W of the W extremity of Choiseul Island.

Bougainville forms a portion of the Republic of Papua New Gunea, while the remainder form the nation of the Solomon Islands.

The coastal description of Santa Isabel will be given following an analysis of the dangers around Santa Isabel and the offlying islands N of the Solomon Islands.

**Aspect.**—The islands are similar in general appearance, having towering mountains and being covered in dense forest. The slopes incline gently to the sea, with mangroves fronting the shore.

# Off-lying Islands and Dangers

**8.2** The **Tasman Islands** (Nukumanu Islands) (4°33'S., 159°30'E.) are comprised of about 39 small and low islands on an atoll reef extending about 11 miles E-W. A vessel visiting this group entered the lagoon by the N pass on the W side of the atoll.

**Anchorage.**—Anchorage was taken near the SE end of the lagoon, in 16m, W of the S end of Nogu Dabu Island, the largest island.

The **Ontong Java Islands** (5°33'S., 159°44'E.) are very extensive and cover an area between 5°38'S and 4°56'S, and 159°07'E and 159°45'E. There are a number of low and sandy islands and islets, which are generally covered with coconut palms, lying on and within the edge of an atoll reef. Luaniua, at the SE end, and Keila Island, in the middle of the SW side, are the largest islands. The crown of reefs is broken in numerous places by generally narrow passes. Kaveiko Pass, 2 miles SSW of the S end of Luaniua, is marked. The seas break heavily at the entrance to the pass. Kaveiniu Pass, 2.8 miles WSW of Kaveiko Pass, is wider and appears safe. Reefs on either side are readily visible.

These two passes are the prime passes used for access to the anchorages in the SE part of the atoll, particularly on the W side of Luaniua.

**Frindsbury Reef** (5°00'S., 159°09'E.), a detached reef about 7 miles NW of the NW side of the Ontong Java Islands, is marked by breakers.

**Caution.**—Fish rafts fitted with radar reflectors are moored in a line about 15 miles E of the group and may best be seen on the chart.

**8.3 Roncador Reef** (6°13'S., 159°22'E.) lies about 40 miles S of the Ontong Java Islands and is disposed in such a manner as to appear as a crown around a lagoon. It is about 6 miles in extent; the entrance to the lagoon is through two passes in the S part. The lagoon affords anchorage, in 27 to 36m, broken coral. Dangers are readily visible from aloft when the light is favorable.

A wreck aground in position 6°15'48"S, 159°22'48"E provides a good radar target.

The **Carteret Islands** (Kilinailau Islands) (04°44'S., 155°16'E.) is a group of six islands on the reefs of an atoll 41 miles ENE of the N end of Buka Island. There is a trading post about midway on the W side of the atoll. Three passes allow vessels to enter the lagoon, but the NW pass is not recommended; it can be followed by vessels drawing up to 2.4m, but there are many reefs and shoals between this entrance and the anchorage.

The SW pass forms a marked break in the reef. Its edges can be distinguished when the light is good. The entrance is about 0.2 mile wide, with minimum depths of 5.5m. Inside the lagoon the channel breaks into two branches running NW.

The S pass is 0.25 mile wide, with minimum depths of 5.5m; the tidal currents reach a velocity of 6 knots.

Vessels can anchor, in about 13m, taking a bearing of  $090^\circ$  at 0.4 mile on the S edge of Iehan Island.

Two wrecks are beached, respectively, on the S side and on the N side of the reef; a third wreck is beached in the N part of the lagoon.

The **MortlockIslands** (Tauu Islands) (4°49'S., 157°03'E.) have been reported to lie 7.5 miles, bearing 350°, from their charted position. This group of some 20 islands and islets are on the reefs of an atoll about 110 miles NNE of Cape Alexander and Choiseul Island. Low and covered with coconut palms, the majority are grouped on the E side of the lagoon. Tauu, the largest, is the S island.

During the Southeast Trades, there is anchorage on the E side of the lagoon, about 135m offshore. During the Northeast Monsoon, a choppy sea prevails, but anchorage can be found in the NW part of the lagoon.

**8.4** Santa Isabel (8°10'S., 159°30'E.), an island lying N of New Georgia Sound, is entirely traversed by a ridge of mountains. Its highest is **Mount Marescot** (8°13'S., 159°34'E.), 30 miles NW of Vikenara. The island is sparsely populated, except near Thousand Ships Bay, at the SE end, and Kia Bay, at the NW end.

Depths in the approaches to the island are deep and clear, but there are vast areas around this island that have not been surveyed. Utmost caution is advised when navigating these waters.

**Vikenara Point** (8°34'S., 159°54'E.) is the SE extremity of Santa Isabel. It is precipitous and dangerous. A continuous narrow coastal reef extends WNW from Vikenara Point to **Sogha Point** (Soga Point) (8°31'S., 159°48'E.). **Vitoria Island** (8°34'S., 159°52'E.), also fringed with a reef, stands 1.5 miles WSW of the point. It is wooded and 60m high.

Mahighe Island (Mahige Island) (8°31′S., 159°55′E.) lies 2.5 miles NNE of Vikenara Point. An 11 to 18m bank, as well as other dangers, extends out for about 3.3 miles to the E of Mahighe Island. Soundings are very irregular in this area. The passage between the island and the dangerous islets that flank the Santa Isabel coast is good, with a navigable width of about 1 mile. With the channel narrowed by reefs and shoals on the W side, two prominent rocks lie on the reef 2.5 miles N of Vikenara Point, with foul ground about 1 mile NNW and SSE of them. Two islands, Pilo Island and Kilio Island, lie on the reefs W of the above rocks.

**Sigana Island** (8°31'S., 159°52'E.) lies on the W end of a reef about 1 mile W of Kilio; a narrow boat channel separates it from the main island.

**Anchorage.**—There is a small and protected anchorage S of Sigana Island, in 31 to 33m. The area lies between the three islets mentioned above.

**8.5** Ngalignagho Island (Nalignago Islet) (8°25'S., 159°55'E.) is located 5 miles N of Mahighe Island. This small sand cay is in the center of a coral reef surrounded by shoals. Dangerous projections extend out N and S of the reef. Irregular depths are in evidence between the cay and the coast W of it. More shoals than charted may exist. Ngalignagho Island is the more distant to seaward of the dangers found in the vicinity of the entrance to Tanabuli Bay. In the approach to this bay, there are a group of islands lying between **Boko Point** (8°27'S., 159°52'E.) and **Martin Point** (8°24'S., 159°50'E.); these islands, known as Jagi, Kapika, Kolare, and Siasigara, lie close off the coast. Passages exist between these islands, but they have not been examined.

**Tanabuli Bay** (Tatamba Bay) (8°24'S., 159°49'E.) is entered between Martin Point, steep and 150m high on Tanabuli Island, and **Draper Point** (8°24'S., 159°48'E.) on Santa Isabel, about 0.7 mile W. The inlet is extensive and irregular. Reefs fringe both sides of the entrance. The entrance on the approach appears to be closed in by the reef extending NW from Martin Point. The bay has 2 arms, one to the W, the other to the South. The inner reaches of the bay should be navigated cautiously as there are several dangers present. The shores of Tanabuli Bay are fringed with reefs.

**Anchorage.**—Good anchorage for small vessels can be obtained, in 30m, mud, in the middle of a cove formed by an indentation in the reefs close W of Draper Point. The anchorage, formed by the reef, is slightly wider than 0.2 mile.

Between Draper Point and **Floakoro Point** (Fulakora Point) (8°21'S., 159°51'E.), about 4 miles NE, the coast is fringed by a reef to a distance of about 0.3 mile in places. Floakoro Point, which is sandy, is marked by a beacon. A spit, with depths of 7 to 12m, extends from the point for about 2 miles to the E.

The coast NW of Floakoro Point is elevated and fringed by a narrow reef.

**Fapuhli Island** (Fapuli Islet) (8°16'S., 159°46'E.), conspicuous, wooded, and about 30m high, lies close offshore. Haevo, a peculiar stone on the coastal reef, lies about 1 mile NW of Fapuhli Island. It is reported that less water than charted exists along the coast. Several coral banks of various depths lie N of Floakoro Point and extend from 6 to 14 miles off the coast between that point and Maringe Lagoon. A careful look-out and extreme caution must be exercised when navigating in this locality.

**8.6** Maringe Lagoon (8°07'S., 159°33'E.), formed between the mainland and a chain of islets surrounded by reefs, is entered between Fera Island and Sulei Island, the two NW islands. The entrance narrows to about 0.8 mile between the reef extending beyond Fera Island to the SE and Tafa Reef (Mid Reef), which is detached from Sulei Island to the NW. The NW end of Fera Island is marked by a rather prominent shed. Except for the dangers off Fera Island, the fairway is clear and deep.

The approach through the entrance is with the cleft in the mountains 4 miles WNW of Mount Marescot bearing 224°; it has been reported (1992) that this cleft was not seen, but on the same bearing lies a bald patch on a hill behind Vale Point, which is useful for identifying the entrance. At HW, a N set of 0.5 to 0.75 knot was experienced at the entrance; on the ebb tide, a weak N set is experienced. Danger Shoal, very shallow on the SW side, inside the entrance, is marked by a beacon. It is generally difficult to identify.

**Buala Light** (8°08'S., 157°37'E.) is shown from the SE end of Vaghena Islet in the SE entrance to Maringe Lagoon. The SE entrance leads between Sogna Reef and the main island along the SW side of Sogna Reef, which dries in patches. The passage narrows and turns between Buala Light and Juakau Islet, and leads into the lagoon, however, local knowledge is necessary.

Buala is situated 1.5 miles W of the light. Buala, the administrative center of Santa Isabel, lies on the SE shore of the lagoon, and the settlement of Ghojoruru, a coconut and rubber plantation, is situated about 6.5 miles NW of it.

**Anchorage.**—Anchorage is available, in 27 to 36m, to the S and SE of Danger Shoal. There is another anchorage, in 31m, off **Ghojoruru Point** (Gojoruru Point) (8°05'S., 159°31'E.) (World Port Index No. 57080), but local knowledge is essential, as there is a marked channel leading to this anchorage.

**8.7 Edwards Bank** (7°44'S., 159°43'E.), with a depth of 5.5m, is marked by breakers 24 miles NNE of the entrance to Maringe Lagoon.

The coast abreast Sulei Island to **Solanadiro Point** (Solanandiro Point) (7°59'S., 159°21'E.) presents a fairly unbroken line. Characteristic of this coastline are the reefs with islands on them. Between Solanadiro Point and the entrance of Estrella Bay, there are several indentations in the coast and a number of off-lying dangers. There are passages between these dangers and also between these dangers and the coast off Santa Isabel, but they have not been completely surveyed. Caution is advised when navigating inside these reefs.

**Estrella Bay** (Ghehe Bay) (7°55'S., 159°11'E.) is located on the E side of a remarkable promontory. Kesuo Cove, the narrow inlet off the bay, is about 0.4 mile wide at the entrance between fringing reefs that also ring the shore.

**Anchorage.**—There is good anchorage anywhere in Kesuo Cove. A vessel anchored off White Rock, which lies on the coastal reef close within the S entrance of the cove, in 29m, mud.

**8.8** The coast between **Ghasetataauro Rock** (Gasetataturo) (7°55'S., 159°12'E.) NW to Cape Megapode has not been examined. It breaks for several bays and is fronted by many dangerous reefs and shoals. Vessels passing along this coast are recommended to keep at least 8 miles offshore.

**Cape Megapode** (7°48'S., 158°59'E.) is a low, rounded, heavily-wooded point. With its fringing reef, it meets the sunken barrier. About 5 miles WSW of Cape Megapode is Mount Gatere, a conspicuous double peak, 540m high. From the cape NW, a submerged barrier reef extends to the **Ghizunabeana Islands** (Gijunabeana) (7°33'S., 158°42'E.), enclosing a lagoon, about 3 miles wide. The seas break at intervals over the reef when the swell is heavy. The reef apparently has no passage.

The Ghizunabeana Islands are a group of islands lying on a reef. Rekata Bay, extending between these islands and the main island, contains several islets and dangers. It is reported that Rekata Bay is best approached from the NW, but the Penrose Patches, lying 2 miles ENE of Cape Pachena, and which component parts of a reef extending N and S, are difficult to distinguish.

**Anchorage.**—Anchorage has been taken, in 26m, mud, about 0.6 mile NW of Taimihaza Island (Taimihaja). There was anchorage, in 37m, E of Memehana Island.

**8.9** The coast WNW from Cape Paehena to **Litundo Point** (Wreck Point) (7°31'S., 158°26'E.) is indented by several bays, densely wooded, and protected by a barrier reef, cut by several passages. The lagoon inside the barrier reef has not been surveyed.

**Austria Sound** (N Entrance) (7°28'S., 158°25'E.), leading into Kia Bay, is 0.75 mile wide between the reefs extending from Kakatina Islands and Rapita Island on the E and W sides. It is deep in the fairway through to Kia Bay.

**Kia Bay** (7°30'S., 158°25'E.), at the N end of the channel between Santa Isabel and Barola Islands, is part of a lagoon contained between the barrier reef. Its outer part is deep and affords no anchorage.

**Caution.**—Durour Ridge, with depths of less than 457m, lies almost 20 miles N of Cape Paehena. The ridge has been surveyed and was found to have three separate shoal patches, with depths from the W-E of 7m, 11.9m, and 10m, respectively. It was reported (2002) that dangerous underwater rocks of uncertain depths lie 10 miles W of Durour Ridge in position 7°10.3'S., 158° 22.1E. Fish rafts, fitted with radar reflectors, are situated about 20 miles NE of the ridge. Apart from these dangers, the coast appears to be free of dangers in the approach.

**8.10** Barola Island, which appears as a continuation of the NW extremity of Santa Isabel, has a range of hills running its entire length. The N side is protected by a barrier reef which

lies 1 to 2 miles offshore, enclosing a partially examined lagoon.

The coast between Port Praslin and Cape Comfort (Lave Point), the NW point of Bates Island, is low and wooded, and presents a broken appearance from seaward. It also appears that the coast is apparently steep-to without any fringing reef.

The barrier reef continues WNW from Cape Comfort to a point about 10 miles NE of Kumboro Peak, at the NE end of Choiseul Island. That part of the reef extending 11 miles from Cape Comfort has not been surveyed, but the remainder, forming a barrier to the entrance to Manning Strait, has been surveyed.

Manning Strait is the passage separating the islands off the NW end of Santa Isabel from those off the SE end of Choiseul Island and has not been completely surveyed. The strait is divided by the two island groups forming the **Aravon Islands** (7°27'S., 158°00'E.). Both groups, Kerehikapa Island to the W and Sikopo Island to the E, are featureless and uninhabited. Reefs extend from the E sides of each island affording sheltered and good anchorage for vessels with knowledge of this area. In Sikopo Harbor, on the E side of Sikopo Island, anchorage may be obtained, in a depth of 25m, in all seasons.

**Tides—Currents.**—The pattern of tidal currents in Manning Strait is rather complex, since the tides on the N coasts of Choiseul Island and Santa Isabel are mostly semi-diurnal, with a range up to 1.5m, while on the S coasts of those islands they are mainly diurnal, with a range of less than 1m; therefore, there is great difference even from the pattern at the N and S ends of Arnavon Islands. Nevertheless, the tidal current in the main channel through the strait sets along it at a rate of less than 2 knots. Rates up to 3.5 knots have been observed over the shoal areas and in the restricted channels.

The current in Northern Passage sets through it at a rate up to 2.25 knots, while outside the passage it sets parallel to the barrier reef.

The current attains a rate of 2 to 4 knots in Kologilo Passage. Slack water occurs in the passage at about half tide along the shore.

The current has a rate up to 2.5 knots in the three S passages. Tide rips and eddies may be experienced S of the submarine barrier reef, and a heavy swell occurs at times in Pasco Passage and over the reef close W of it.

**Depths—Limitations.—**As defined by the 20m curve, the barrier reef in the N entrance to Manning Strait is continuous from Suki Island to North Passage. West of North Passage, the reef becomes more broken, with deep water between the shoal areas. Within the 20m curve, the reef has isolated depths of 7 to 14m. Fahlander Shoal (7°11'S., 157°35'E.), about 6 miles NE of Cape Kumboro, has a least depth of 7m and breaks in heavy weather. The E edge of Fahlander Shoal has a depth of 8.2m, with lesser depths extending to the West. Depths of 5.5 to 9.1m lie about 2.3 miles S and 2.8 miles SE of the 8.2m depth. Wooding Patches (7°15'S., 157°43'E.) has depths of 15.6 to 22m. A 13.6m shoal, with an unexamined shoal patch close W of it, lies 1.5 miles WNW of Wooding Patches. Several shoals lie S of Wooding Patches; Asbey Reef, with a depth of 10.8m, lies 5 miles ESE of Wooding Patches, while Audrey Reef, with a charted depth of 6m, is located 6 miles further SE.

Laiena Rock, 5m high, is located about 0.8 mile NNW of Silkopo Island, and is surrounded by an extensive reef. **Haber-**

**lin Reef** (7°24'S., 158°02'E.), located about 5.5 miles E of Laiena Rock, has a least depth of 7.2m, and is the main danger on the E side of the strait.

The barrier reef at the S entrance to Manning Strait runs from Hilohavo Islet to Raverave Islet, with isolated depths of 3.4 to 9.1m, and deep water passes between the shoal areas.

**Directions.**—Two defined, deep entrances exist through the N barrier reef. **Northern Passage** (7°14'S., 157°50'E.) is about 1 mile wide and has a least depth of 34m. Haycock Island, bearing 174.5°, leads through the reef. There are several openings in the reef W of Northern Passage, with depths of over 21.5m. The deepest entrance, which is the second entrance referred to above, lies between Fahlander Shoal and the barrier reef 4 miles E of the shoal. The channel cannot be recommended as the track has not been fully surveyed, and requires local knowledge.

Three main passages lead through the reef in the S approach to the strait. **Pascoe Passage** (7°39'S., 158°17'E.) is about 2 miles wide, with a least charted depth of 33m. **Mount Sears** (7°28'S., 158°16'E.), a 278m high peak located on the W end of Barona Fa Island, steered for on a bearing of 357°, leads from seaward through the passage.

Middle Passage, about 0.5 mile wide, lies about 5.5 miles W of Pascoe Passage, and has a least charted depth of 68m. A patch, with a depth of 20m, lies near the center of the channel. Mount Sears, bearing 029°, leads through the pass.

West Passage is the shallowest of the three S entrances to the strait, showing a least charted depth of 23m. A shoal patch, with a depth of 11m and depths of 19 to 20m, lie on the E and W sides of the channel.

If the vessel has a sufficient height of eye to sight it, **Suki Island** (7°19'S., 158°05'E.), bearing 001°, leads through the passage. An alternate mark for entering the passage is to steer with the W edge of the S Aravon Islands bearing ahead 355.5°. Caution is advised when using this alternate mark, as the track passes close E of a 19m patch 0.75 miles S of the Aravon Island mentioned above.

Once clear of the barrier reef, vessels may safely navigate the E portion of the Manning Strait following the recommended track. There are no obvious steering marks, but the dangers are easily seen under most weather conditions. The SE end of the track lies bearing 357.5°, 8.5 miles from Mt Sears, while the NW end lies bearing 277°, 14.5 miles from Suki Island. A course of 307° defines the track between them.

The channel on the W side of the strait requires local knowledge.

The NW end of Santa Isabel is prolonged by smaller islands and islets that Manning Strait separates from the islands off the SE end of Choiseul Island. Two prominent islands, Nohabuna Island and Malaghara Island, located 2.5 miles SSW of **Suki Island** (7°19'S., 158°05'E.), form this NW extremity of the arch-ipelago. Molakobi Island, 108m high, is the largest of nine is-lands of this group lying W of Kologilo Passage. The only breaks in the chain of islands and reefs of the archipelago are the narrow, torturous passes. Gaghe Island, which is the highest, is dominated on its SW side by Mount Beaumont, the summit of which is rounded and rises to 290m.

Dart Sound indents to the E, between Barora Ite Island and the Barola Islands, and connects with the central part of Austria Sound. Dart Sound holds several islets, and a few shoals. Beacons mark the reef which fringes the islets on the SW side of the channel connecting Dart Sound and Austria Sound.

Rob Roy Channel, which exits on the W side of Austria Sound near its S entrance, is apparently deep but should be navigated with caution. Coral shoals and islets are found in its SE part.

**8.11 Austria Sound** (South Entrance) (7°42'S., 158°29'E.) opens between the W islet in the Barrier Islands and Retujivala Island. The bay is spacious, containing several islands separated from the main island by a narrow continuous channel of varying depths, known as South Channel and Northwest Channel. The entire area S of this bay is encumbered by coral shoals, and the passage between Barora Ite Island and Santa Isabel is accessible only to boats. Tidal currents here can be 5 to 7 knots. The best anchorage is situated in the S part of Austria Sound on the N side of the Barrier Islets, in a depth of 35m, 0.1 mile from **Chislett Island** (7°43'S., 158°30'E.), with the island bearing 090°.

The coast between the S entrance of Austria Sound to Port Korigole SE is bordered by numerous islets on reefs. The passage between the islets and the coast are narrow and shallow.

**Port Allardyce** (7°41'S., 158°39'E.) is formed and protected on the SE by a 30m high peninsula, and on the W by islets on a large reef. Its entrance, at least 300m wide between reefs, is deep and safe. Beacons standing on the main island, in line bearing 030.5°, lead through the harbor entrance. It is reported to be the only large vessel anchorage known and would be obtained in the middle of the harbor, in 44 to 49m. A small vessel will find excellent anchorage, in 15m, at the entrance of the cove on the SE side of the harbor.

**Korigole Harbor** (8°03'S., 158°58'E.) lies in the SE part of the bay entered between Rob Roy Point, the W extremity of Finuana and Hujuai Point. Sharp Peak, a prominent hill, 485m high, located 8 miles E of Hujuai Point, is a good landmark when approaching Korighole Harbor. There is anchorage, in 13m, mud bottom, distant 0.6 mile, with Rob Roy Point bearing 240°.

**8.12** The coast to **Furona Island** (8°08'S., 159°05'E.) is low and fringed by reefs that project for more than 1 mile seaward. Santa Isabel is then fronted by a barrier reef to San Jorge Island. The outer edge lies from about 1.5 to 4 miles offshore. The reef is sheer toward the open sea and is in large part submerged, and extreme caution must be exercised when approaching the coast. The channel between the barrier reef and the coast is accessible via several passes, but it has not been surveyed completely. Particularly dangerous is that portion of the barrier reef W of San Jorge Island which is much broken and submerged.

**San Jorge Island** (8°26'S., 159°36'E.) is separated from the main island on the E by Thousand Ships Bay and on the N by the narrow Ortega Channel, which is only practical for boats. There are two flat-topped summits on the island.

**8.13** Thousand Ships Bay (8°27'S., 159°41'E.) is formed between the E side of San Jorge Island and the main island. Depths range from 27 to 55m in this bay, which is encumbered with islands and reefs.

The shores of the bay are fringed by a reef and bordered by mangroves. The bay opens between Lilihignia Island, near the coast, about 3 miles NW of Sogha Point. Utuha Island (8°30'S., 159°43'E.) is on the N side of a reef in the middle of the entrance. Dampier Shoal lies 1.25 miles W of Utuha Island. Round Island, 1.5 miles NW of Lilihignia Island, is on the N end of a reef. There are other dangers N and NE of the islet. Vulavu Anchorage lies in the SE part of a bay, about 6 miles NW of Vitora Island. For the most part the anchorage is clear of dangers. Depths in the bay within the 30m curve are moderate. Vulavu village lies on the E shore of the bay and near the anchorage where small vessels may obtain anchorage during the Southeast Trades, in 11.9m, sand.

Cape Labee (7°29'S., 157°53'E.) is the SE extremity of a circular chain of palm-covered islets that enclose a lagoon. Haycock Island, on the W side of the lagoon, appears above the lagoon long before the other islets and becomes a useful landmark. It marks the W side of Manning Strait. The group of islands W of Cape Labee extend for about 25 miles to the shallow passage separating Rob Roy from Choiseul Island. The islands are generally low and are densely forested except for a few clearings on Vaghena Island (Wagina Island) (7°26'S., 157°46'E.). Vaghena Island and Rob Roy Island, between Haycock Island and Choiseul Island, are about 60m high and have numerous islets and reefs nearby. To the S, a string of shoals connects Ravirevi Island and Rengge Island (Rengi Island), 14.5 miles West. This area has not been completely surveyed and unknown dangers exist inside the 183m curve. Shoals extend for about 10 miles to seaward N of Vaghena Island.

Hamilton Channel, W of Vaghena Island, is the principal channel through this group of islands. The N end of the channel is encumbered by shoals which follow no pattern, and the S end is obstructed by a rock with a depth of 16.8m. The channel between Rob Roy Island and **Susuku Island** (7°26'S., 157°38'E.) is narrow but deep. The passage between Rob Roy Island and Choiseul Island is obstructed by rocks. Tidal currents will attain a velocity of 5 to 8 knots in these passages.

#### **Choiseul Island**

**8.14** Choiseul Island (7°00'S., 157°00'E.) is an island, separated from Santa Isabel by Manning Strait and from the New Georgia Islands by the continuation of New Georgia Strait. It is 83 miles long and 20 miles wide. Mountainous and covered with forests, Choiseul Island culminates at over 960m at Mount Gourdin (Mount Maitabe), in the center of the island.

Only the SW coast has been surveyed and great caution is necessary when approaching the NE coast and the S coast as far W as **Sumbi Point** (7°18'S., 157°01'E.). It has been established that the barrier reef on the NE coast rises to over 183m and extends 5 to 7 miles offshore.

**Cape Kumboro** (7°18'S., 157°31'E.), the E end of the island, is dominated by Kumboro Peak, 625m high, standing about 2 miles S of the cape. Laiana Island lies about 4.5 miles ESE of it. Several islands extending SW from Laiana Island to the coast form the E side of Taura Bay. Reefs, forming the outer barrier, lie up to 5.5 miles NE and 12 miles E of the Cape. The seas break heavily on these reefs.

**Cape Alexander** (6°35'S., 156°30'E.), near the N end of Choiseul Island, is low and rolling. The coast is fronted by a fringing reef varying in width from about 0.3 mile off Cape Alexander to 0.75 mile off West Cape, about 7 miles SW.

**Choiseul Bay** (6°42'S., 156°25'E.) indents the W side of the island and is protected on the W by a barrier reef broken by three entrances. **Emerald Entrance** (6°42'S., 156°34'E.), the best of the three, leads between the reef bordering Siposai Island to the S and a detached part of the barrier reef and the reef bordering Parama Island to the N. It is marked by beacons. Small vessels should favor the N side of the channel to avoid shoal patches located beyond the edge of the reef.

Anchorage is available here and requires local knowledge. Immediately S of the entrance of Choiseul Bay, the tidal currents set SE to NW at a velocity of 2 to 3 knots at springs.

The coast SE to Mole Island (Moli Island) is slightly indented and the hills inland, steep and densely wooded, rise to 427m.

**Heming Bank** (6°46'S., 156°24'E.) is an extensive area consisting of coral and sand with a least depth of 6.7m. The N entrance of Oldham Deep, W of the SW corner of Heming Bank, is the beginning of a passage over 200m trending S from its entrance, then slightly East. Several shoal patches, with a depth of less than 30m, lie close to both sides of Oldham Deep.

Off the coast, Ghuruvasu Point is distinguished by its distinctive patches of white cliff. Mole Island, a low island covered with palms, lies close offshore and is not readily discernible from seaward except from the S at a distance of about 7 miles.

Webb Reefs, located about 10 miles S of Mole Island, has depths of 11.4 to 13m. Adjacent to the barrier reef between Cook Reefs and Webb Reefs are several patches with depths of 21 to 50m. Numerous patches appear NW of Webb Reef as far as the S entrance of Bougainville Strait and are not easily distinguished. Cook Reefs extend NW and SW, 5.25 miles SSW of **Sasa Point** (6°57'S., 156°41'E.).

**8.15** The **Zinoa Islands** (6°53'S., 156°37'E.) are easily identified because the trees on the two southernmost of the Zinoa Islands form to give the effect of a remarkable "top hat," about 70m high.

**Anchorage.**—Sheltered anchorage can be obtained about 137m offshore anywhere from off the Zinoa Islands SE to **Sasamungga Point** (7°02'S., 156°46'E.), in depths of 20 to 40m.

The 200m curve, which lies about 5.5 miles offshore abreast Sasamungga, trends about 19 miles WNW, then W and S across the S approach to Bougainville Strait. When abreast the Zinoa Islands, it is 10 miles offshore. The dangers inside the 200m curve have not been investigated.

The coastal range SE to the **Kolombangara River** (6°58'S., 156°43'E.) rises to a height of 548m and then it is broken by a valley where the river discharges. The tide rips usually occurring close seaward of its mouth are as radar conspicuous as its two entrance points. Small bays with intervening low headlands is characteristic of the coast from Sasamungga to **Vaghoe Point** (Vughoe Point) (7°16'S., 156°52'E.). There are a number of villages in the vicinity of Vaghoe Point. A conspicuous church, with an iron roof and bell tower, is the most prominent building on the S coast of Choiseul Island, particularly when

reflecting off the afternoon sun, in the village of **Mboe** (Poe) (7°05'S., 156°48'E.). Both Sumbi Point and Sambe Point are distinguishable from seaward by their whitish cliffs about 20m high. **Manggo Bay** (7°19'S., 157°04'E.) lies between these points, but has not been fully surveyed, although a vessel's survey found a number of dangers in its SW part.

The land rises steeply to a series of irregular ranges of considerable height which are heavily wooded and very difficult to distinguish as the coast trends S to Sambe Point. The mariner should be able to identify the summits of Mount Sambe, Mount Keleve, and Mount Tomba and Mount Lou Cone, 3 miles NNW of Mount Sambe. These summits are frequently covered by clouds.

Caution. —Many reefs and islets front the coast from Sambi Head to Muzo Island and extend up to 2.5 miles offshore. Vessels should keep at least 3 miles off Sumbi Point, 9 miles off Saasa Point, and 5 miles offshore between Muzo Island and Sambe Point. Extreme caution must be exercised if the 183m curve is crossed, as the area within it has not been surveyed and reefs are usually found within this curve. These conditions prevail in the stretch of coastline between Muzo Island and Cape Labee. Reefs and shoals here reach seaward for a distance up to 4.5 miles, the positions of which can best be seen on the chart.

A vessel approaching the Choiseul Group from the SE will first sight Kumboro Peak and soon thereafter identify some of the peaks on the range running W along this part of the coast, followed by Haycock Island, Raverave, Ghiri along with Sunda and Undalou, about 1.5 miles NE of Ghiri. The islands of Rengge and Muzo, about 9 and 16 miles WNW, respectively, of Ghiri will also be able to be identified. The identity of the islands mentioned can best be made at long range as they come up against the partially dipped background of Vaghena Island and Rob Roy Island.

### The New Georgia Islands

**8.16** The New Georgia Islands are separated from Choiseu Islandl and Santa Isabel, about 30 and 50 miles NE, respectively, by New Georgia Sound. The largest islands are volcanic in origin and the mountains are in quite symmetrical cones. They rise from 900 to more than 1,200m, and their summits are often lost in the clouds. Submarine volcanic manifestations have been reported in the S approaches to the group. The survey of these islands is very incomplete, generally dating from the end of the 19th century.

**New Georgia** (New Georgia Island) (8°20'S., 157°30'E.) is the largest of this group. The description of the group will be counterclockwise from the SE portion. The S coast of New Georgia will be described with Blanche Channel in paragraph 8.31.

**Nggatokae** (Gatukai) (8°47'S., 158°11'E.) is bold and steep except on the N. The summit of Nggatokae is a volcanic cone, flattened at the top, rising 887m into the clouds. Cape Pitt, forming the SE part of Nggatokae, is a bold, dark cliff. A bay NW of Peava Village is clear of dangers, but there is no anchorage for a vessel.

Kicha Island, a small wooded island with no fringing reef, lies 5 miles ENE of Cape Pitt.

Mbulo Island, separated from Kicha Island to the SE by a deep channel, is a densely-wooded island that is steep-to, except at one place on its E side. It is of coral formation.

Malemale Island (Male Male Island) is small and low. A steep-to reef, which breaks if there is a swell, extends 0.2 mile from the island.

**Brougham Shoal** (9°02'S., 158°18'E.) is an unexamined offlying danger about 15 miles S of Mbulo Island, reported to have a least depth of 7.3m. It may break in heavy weather.

Shoal water exists in an area of about 4 miles, 15.5 miles SW of the S point of Nggatokae. The area has been frequented by numerous underwater volcanic activity.

**8.17** Vangunu Island (8°40'S., 158°00'E.) is SE of the principal islands of the New Georgia Islands. It is located about 60 miles WNW of the Russel Islands. It is separated from New Georgia by the narrow and tortuous Njai Pass. Reefs and islands surround VangunuIsland on all sides, delimiting two big lagoons, Kolo Lagoon and Marovo Lagoon on the E and W. Marovo Island has been surveyed and can be approached by breaks in the barrier reef.

The extinct volcano that constitutes the major part of the island culminates in **Mount Vangunu** (8°41'S., 158°00'E.). The crown of the crater, which is open to the SE, has 700 to 1,100m high summits that are usually hidden in clouds. The Mbareke Peninsula, on the NE side of the island, while not as high as Mount Vangunu, has several remarkable summits.

The series of long but narrow coral islands extending N from Nggatokae Island and running parallel with the NE shores of Vangunu Island and New Georgia are evidently an upheaved ancient barrier reef; they are all densely wooded and are referred to as Tomba by the natives. With the exception of **Minfanga Island** (Mboli Island) (8°41'S., 158°13'E.), none of the barrier islands are inhabited. The channel between the two barrier walls is deep, ranging between 73 to 219m. From a point near **Luma-liha Island** (8°27'S., 158°04'E.), the barrier reef and islands continue in a W direction, gradually decreasing the distance offshore, with numerous breaks in their continuity. There are numerous clear and deep passages through the steep-to fringing reefs as shown on the chart.

### New Georgia

**8.18** New Georgia is predominately mountainous. At its NW end is a range of mountains with peaks rising to 914m or more. Mount Vina Roni, shaped somewhat like a reclining lion, stands 13 miles S of the N part of the island.

The NE coast of New Georgia continues with a chain of islands that is an extension of those that shelter Marovo Lagoon. These islands are heavily wooded and are separated from each other by passages for small vessels. They have few landmarks.

**Hohopa Point** (8°15'S., 157°49'E.), at the bend made by Mondo Mondo Island, is a projection of the coastal reef. Ramata Island, about 10 miles NW of the point, is marked by a village near its NW end and by a house with a nearby old fort built on the summit of a 14m escarpment.

**8.19** Lever Harbor (8°01'S., 157°35'E.) (World Port Index No. 56965) is a small, but deep, inlet located about 7.5 miles SE of Visuvisu Point. The harbor, which is entered to the W of

a 12m high, rocky point, offers shelter from all but N winds to vessels loading timber. A white beacon stands on the seaward side of the point. The shores of the inlet are low and fringed by mangroves and coral reefs.

**Depths—Limitations.**—The fairway has a least width of about 90m near the entrance, but widens further in. Three sets of range beacons lead through the harbor. The first stand in line bearing 214°, and leads from seaward. The second pair stand on the coastal reef N of the harbor entrance; in line astern bearing 348° the beacons lead past a small oil wharf on the W shore, and a small timber jetty connected to a stone causeway on the E shore. A third set of beacons at the head of the harbor, in line bearing 227°, lead to three timber berths on the SE shore. Vessels using the timber berths Med-moor to bollards on shore, anchoring on a soft mud and fine sand bottom, good holding ground.

**Caution.**—Caution is advised, as this harbor requires local knowledge.

The coast and the barrier reef NW of **Kolombagia Island** (8°01'S., 157°35'E.) to Visuvisu Point the N end of New Georgia has not been surveyed. There is a light shown from the reef fringing the point.

#### Kula Gulf

**8.20** Kula Gulf lies between the NW coast of New Georgia and the E side of Kolombangara Island. Depths are great. The W and apparently the E side of the gulf are steep-to. Blackett Strait opens in its SW corner between Arundel Island and Kolombangara Island. At the head of the gulf, Hathorn Sound and Diamond Narrows separate Arundel Island from New Georgia. The coast between Visuvisu Point, the N extremity of New Georgia, and Rice Anchorage has not been surveyed.

**Rice Anchorage** (8°08'S., 157°19'E.), close S of Ndukonduko Point, is about 0.3 mile wide between a drying reef to the S of the N point and the one that fringes the S point. A bank, sand and mud, projects the E shore of the anchorage about 0.2 mile offshore where a river empties. Small vessels can anchor in 36m, mud bottom, sheltered from NE and NW winds.

Enoghae Inlet, with its entrance at position 8°10'S, 157°18'E, opens 3 miles SSW of Ndukonduko Point. This sound is tortuous and has a deep entrance about 200m wide between lateral dangers, but narrows to less than 90m off Transit Point. Vessels will anchor, in 22m, mud about 0.5 mile SSE of Transit point.

Kolombangara Island, the E side of which forms the W shore of Kula Gulf is free from off-lying dangers, and steep-to outside the coastal reef, which extends only a short distance. This coastal reef is always visible except off the NE where Vao Rock (Waugh Rock) and other shoals lie about 0.3 mile offshore.

**Vao Rock** (Waugh Rock) (7°55'S., 157°11'E.), on which the sea breaks occasionally, is an easily identified and enduring landmark used by vessels navigating Kula Gulf. It is reported to be an indispensable navigational aid at night.

**8.21** Kolombangara Island (7°59'S., 157°04'E.) is an extinct volcano of imposing proportions, rising directly from the sea to a series of remarkable peaks over 1,600m, and forming

the top of the crater. There are craters on the E and W sides of this crater.

**Port Bambari** (Jack) (8°04'S., 157°12'E.), a good anchorage, is entered through a deep, but very narrow channel 1.5 miles S of Surumuni Cove. The entrance is not easily seen until the square summit of Kolombangara Island's crater bears 270°. It is then advisable to hug the N point, which is shear, on entering, then head for mid-channel and anchor, in 25m, 0.5 mile inside the channel.

**Hathorn Sound** (North Entrance) (8°11'S., 157°12'E.), the shores of which indents toward the S between New Georgia and Arundel Island, is almost fringed by reefs, but has been found to be clear of dangers outside of the reef and have depths in excess of 30m. A light marks the E side of Hathorn Sound at Tunguirili Point.

**8.22 Port Noro** (8°13'S., 157°11'E.) (World Port Index No. 56975), situated on the E shore of Hathorn Sound was developed (1980) as a deep-water facility for vessels loading copra and frozen fish.

Solomon Taiyo Wharf, 60m in length, is situated adjacent a fish freezing plant at the N end of the sound. Reportedly the wharf has alongside depths of 9m and will accommodate vessels up to 4,000 grt. Noro Overseas Wharf, about 0.8 mile S of the fish pier, has a length of 62m, and a 14m depth alongside.

**Pilotage.**—Pilotage is available on request. The local authorities may be contacted through the Solomon Islands Ports Authority in Gizo.

**Anchorage.**—Anchorage is available near the head of the sound, with a low flat island off the E shore, located about 2 miles S of the wharf bearing 098°, 0.2 mile distant, in a depth of 31m, or in depths of 33m a little further N.

Vessels are urged to contact the local authorities for the latest information on this port before planning a voyage here.

Diamond Narrows, a continuation of Hathorn Sound in a S direction, is only about 90m wide, with a least depth of 9m. The channel is not recommended for deep-draft vessels because of the numerous islands, shoals, and sunken rocks in the S approach.

**Tides—Currents.**—Tidal currents run with considerable strength through Diamond Narrows, but a vessel anchored in Hathorn Sound would not feel its influence. In the narrows they are reported to attain a velocity of 5 knots at strength. The rising tide in Diamond Narrows is N, while the falling tide is S.

#### **Vella Gulf**

**8.23** Vella Gulf is delimited on the E by Kolombangara Island, on the S by Gizo Island, and on the W by Vella Lavella. The gulf is wide open to the N. Its S accesses are Ferguson Channel and Gizo Strait. At the head of the gulf is Blackett Strait.

**Lotu Harbor** (Sandfly Harbor) (7°59'S., 156°57'E.) and **Meresu Cove** (8°02'S., 156°58'E.) are anchorages acceptable for small craft with local knowledge. Meresu Cove, 90m wide, has depths of 18.3m in the entrance and 14.6 to 18.3m within.

**Vovohe Cove** (8°07'S., 157°06'E.) is a safe anchorage for small vessels in 29.3 to 31m. The entrance and most of the cove has been dragged to a depth of 10.7m.

**8.24** Ringgi Cove (8°07'S., 157°07'E.) (World Port Index No. 57005) is located close E of Vovohe Cove. Both of the cove's headlands are steep-to, particularly the E side of the passage. Passage to the inner cove is restricted to small local vessels. The E side of the cove is formed by a promontory. It has been reported that this port is no longer used for timber exports.

**Depths—Limitations.**—Close within the E entrance points stand some conspicuous tanks, and a wharf 27m long. Some cranes are situated 0.25 mile SSE of the wharf. The wharf has been reported to have depths of 24m alongside, and has also been reported to handle vessels with a maximum length of 60m, and a maximum draft of 8m. Larger vessels are reported to Med-moor to a bollard.

**Anchorage.**—Anchorage has been taken by vessels up to 10,000 grt in the outer part of the cove.

**8.25** Blackett Strait is the deep channel which separates Kolombangara Island from Gizo Island, Vonavona (Wanawana), and Arundel Island. The S side of its E part is bordered by the barrier reef, which extends to the N of Vonavona and Arundel Island. It is sheer, and this side must be favored when transiting the E part of the strait. The channel is about 3 miles wide abreast Makuti Island, E of which it widens for a short distance, but gradually narrows and is but 0.5 mile wide at its E end where it enters Kula Gulf.

The tidal currents run at a velocity of 2 knots through the narrowest part of the strait, setting E and W, with eddies and tide rips in places.

Vella Lavella, fringed by islands and reefs, is indented by numerous small bays. An off-lying barrier reef, of which approaching soundings give virtually no indication, forms an arc over 11 miles off the NE quadrant of the coast. Vessels running the coast in this area should not approach within 6 miles. The coast continuing to the S extremity of Vella Lavella is fringed by reefs and there is no suitable anchorage for large vessels.

Of importance on this side of the coast are the mission stations of **Mibilua** (Biboa) (7°55'S., 156°41'E.) and **Ndovele Cove** (Doveli Cove) (7°35'S., 156°38'E.). Ndovele Cove and Paraso Bay afford limited anchorage, but have very deep water.

The W coast of this island is reported to be free from offlying dangers beyond 1 mile between **Sorezaru Point** (7°33'S., 156°37'E.) and **Sauka Point** (Sokovovi Point) (7°37'S., 156°29'E.). Conspicuous rocks lie on the coastal reef, indented by several small bays on this part of the coast.

**Anchorage.**—Anchorage may be taken about 1 mile S of **Mundi Mundi** (7°39'S., 156°30'E.), in 29m. Caution is advised because several foul patches exist near this anchorage.

**8.26** The coast between Sauka Point and **Cape Middleton** (7°42'S., 156°31'E.) is fronted by reefs and foul ground extending 1 mile offshore. These reefs extend about 2.5 miles SSE from Cape Middleton to Omaura Island. Sandfly Bay is encumbered with dangers and Mbava (Baga) is to a large extent surrounded by fringing reefs.

**Anchorage.**—Anchorage is good for large vessels, in 34.7m, about 0.4 mile N of Inia Island, which is close-in E of Mbaya Island.

Beagle Channel, between Mbava and Turovilu Island, can only be transited in favorable light because of dangers that exist there. The tidal currents, which flow N and S, can attain speeds of 4 knots at spring tides.

**Nakaza Island** (7°53'S., 156°30'E.), separated from Mbava by clear deep water, is 12m high and lies on a detached reef, which extends about 2.5 miles W from the island. A light is shown from this island. The NW approach, between Mbava and Nakaza, is clear, but at times strong tide rips are encountered. It is therefore desirable to keep within 1 mile of Mbava when on a NW track.

Vella Lavella is an island covered with forests. It is mountainous with saw tooth ranges and steep summits, several of which are extinct volcanoes, some of which are visible from about 60 miles. Mount Semaj, 850m high, is a rounded peak in the center of the island. Mount Nasus, 820m high, is a rounded summit with twin peaks at the N end of the island. Mount Walker is hidden from view, as is Mount Brooks. There is an airport situated on Vella Lavella.

Wilson Strait separates Vella Lavella and Ganongga and joins Gizo Strait to the E. This strait is free from dangers, and the shore on either side may be approached to a distance of 0.5 mile.

**Ranongga** (Ganongga) (18°11'S., 156°35'E.), separated from Simbo Island by a clear and deep channel 4 miles wide, is steep-to with no off-lying dangers along its E and W coasts. The N extremity is fringed by reefs projecting 0.5 to 1.5 miles offshore. The area around Ghzi Island (Woi Island) is very dangerous. There are several missions on the island, mostly at the S end. With the exception of low land at the N and S extremities, the interior is hilly, attaining an elevation from 305 to 670m.

The swell, almost a permanent phenomenon off the coasts of Ranongga, makes open anchorages very precarious. Tidal currents during the Southeast Trades were found to be weak in the vicinity of the island. At various times, there was a slight set to the NW.

**Caution.**—It was reported that Ranongga and its associated reefs lie 2 to 4 miles further W of their charted positions.

**8.27** Simbo Island (8°18'S., 156°31'E.), lying about 18 miles SW of Gizo Island, is composed of two mountainous portions, joined by a narrow belt of lowlands. The S part is flanked on the E side by an elongated island and the very narrow channel that separates them is entered at the N end by boats only. Coral reefs on the N portion of the island front the E and W sides.

Off-lying dangers exist a little over 2 miles S of Cape Satisfaction, the S extremity of Simbo Island, with depths of 12.8 to 18.3m. Between this bank and Simbo Island, another bank exists, with depths of 9 to 23m. Two rocks and heavy breakers lie 0.5 mile E of Cape Satisfaction.

**Port Simbo** (8°17'S., 156°32'E.), on the W side of the island, formed by the indentation in the coast and protected on the N by a coastal reef, and on the W by a detached reef, makes Simbo a snug harbor. The approach channel leads in from the S between the detached reef and the coastal reef. Black Rock, 1.5m high, lies on the fringing reef on the E side of the S entrance.

**Anchorage.**—Anchorage can be obtained in the harbor midway between the entrance points, in 16 to 27m. Swinging room

is very restricted, but shelter is provided from all winds. The entrance is marked by two beacons.

**8.28** Ferguson Passage, leading into Blackett Strait from the S, separates the reefs off Gizo Island from those which extend from Vonavona Island. The passage, about 1.5 miles wide, is free of dangers and steep-to on both sides.

The passage may be recognized by the difference in height of the islands on either side; those on the Gizo Island side are planted with coconut palms, while those on Vonavona Island are thickly wooded and somewhat higher. **Makuti Island** (8°08'S., 156°58'E.), on the E side of the channel's opening into Blackett Strait, is on the NE end of a sheer, detached reef.

**Gizo Island** (8°06'S., 156°50'E.) and a chain of smaller islands that work their way out SE of Gizo are surrounded by a barrier reef. North and E, the reef, plainly visible and marked with islands and coral rocks, dries in places. South and W, the reef is submerged and there are scattered shoals separated by deep water. The danger line marking the reef is the 183m curve.

Gizo Island is mountainous and heavily wooded, except for **Titiana Point** (8°07'S., 156°49'E.), its S end and **Pailongge Point** (Pailongo Point) (8°06'S., 156°48'E.), about 2 miles WNW, where there are villages in the midst of coconut palms.

The channels in the E part of the barrier reef are tortuous and are practical only for small vessels with good local knowledge and with favorable light.

The only channel for ocean vessels is SW of Titiana Point, in the approach to Gizo Anchorage; it has a swept depth of 12.8m. The track passes about 0.1 mile W of Wright Shoal, and several other dangers best seen on the chart. Caution is advised on entering the harbor during the late morning hours, when the glare of the sun causes the range beacons and reef edges to become difficult to distinguish.

**8.29** Gizo Harbor (8°06'S., 156°51'E.) (World Port Index No. 56970) is the administrative and headquarters for the Western District of the Solomon Islands. The harbor is the center for the export of copra, cocoa, fish, timber, and cattle. It is a port of entry.

**Depths—Limitations.**—The port has two principal wharves, as well as numerous small wharves and jetties on the S side of the harbor. Government Wharf, 80m long with a depth of 5m alongside, is situated 0.15 mile NW of a flagstaff near the E end of town. A wooden wharf, 36m long with a depth of 5m alongside, is situated 0.5 mile NW of the flagstaff.

**Pilotage.**—Pilotage is available for the port; the local authorities should be consulted for details.

**Anchorage.**—Anchorage can be found in a small bay on the N side of the SE end of Gizo Island. Logha Island (Loga Island) protects it to the NE and the reef extending nearly 0.5 mile SE of the island. Anchorage can also be taken, in 23.8m, sand and shell, with Nusambaruku front leading beacon bearing 301°, 0.35 mile from the island. A foul patch was reported midway between this anchorage and Nusambaruku Point.

South of the S entrance to the harbor, anchorage can be found, in a depth of 39m, with coarse sand and good holding, with Epangge Island front leading light bearing 059°, 1 mile. The anchorage is exposed to S winds and swells.

#### **Vonavona Island (Papara Island)**

**8.30 Vonavona Island** (Papara Island) (8°12'S., 157°02'E.), separated from Kohinggo Island (Arundel Island) by a lagoon of the same name, appears to be of coral formation, generally flat, and about 61m high. The island is densely wooded to the water's edge. The SW side of Vonavona has a broad bay. Nearly the entire W coast is fringed by a narrow reef. A barrier reef with islands and rocks extends for about 4 miles to the NW of **Pature Point** (8°11'S., 157°01'E.). This reef forms the E side of Ferguson Passage; about 0.5 mile within its extremity lies the Pailerongoso Islands.

A passage, marked by beacons, leads through the lagoon and is suitable for small craft with drafts not exceeding 3m; it is tortuous and requires considerable local knowledge.

From the Pailerongoso Islands, the barrier reef extends E to the N extremity of Kohinggo Island, following the S side of Blackett Strait. There are many islands on the reef, which is steep-to throughout its entire length and has no anchorage off it.

The barrier reef, which rims the S coast of New Georgia, extends between Rhodes Point at the S end of Vonovona Island, E to Roviana Island, in the W entrance to Blanche Channel. This reef, over 1 mile wide in places, shelters a lagoon cluttered with numerous reefs on the W side is Port Munda.

**8.31 Munda Harbor** (8°20'S., 157°13'E.), lying above the barrier reef and Munda Point, is considerably encumbered with islands, shoals, and coral heads. Access to Port Mundais is via a 30m wide channel, with depths of at least 4.5m, cut in the bar that extends between Nusalavata and Mbirimbiri Islands on the barrier reef. The axis of the channel is marked by a 054° lighted range. It is advised to hold strictly to this range because there are remains of metal stakes on both sides. Beyond the bar, a channel which requires local knowledge leads to small wharves near Munda Point.

Roviana Lagoon is formed by a string of barrier islands and reefs which commence at Port Munda and extend in an E direction to **Mbalumbali Island** (8°24'S., 157°32'E.), which marks the W side of Gubbins Channel. This barrier of wooded islands look very much alike and have narrow passages between them. The lagoon is about 20 miles in length and varies in width from 1 to 3 miles, the narrowest part being at the E end. The seaward side of the islands mentioned has a narrow fringing reef which is steep-to, depths of 182.9m and more being found within 0.1 mile offshore.

Roviana Island, at the SW end of the lagoon and on an elbow of the reef W of Tambatuni, is prominent.

Blanche Channel is enclosed between the main island of New Georgia and the Hele Islands on its N and E sides, and by Tetipari Island and Rendova Island on its S and W sides. The channel and its entrances are deep throughout; the shores are steep-to, and there are no dangers. A discussion of New Georgia SE to Viru Harbor and on to Vangunu Island will continue in paragraph 8.35 after analyzing the islands S of Roviana Lagoon.

**8.32 Rendova Island** (8°32'S., 157°18'E.), on the SW side of New Georgia, is entirely mountainous and densely wooded.

The highest summits are in the N part of the island where Rendova Peak, an extinct crater, broken down on its W side, culminates in a height of 1,060m. Tetipari Island, the island E of the SE end of Rendova Island, has no prominent peaks. Balfour Channel, deep and safe, separates the two islands. The tidal current runs through the channel with moderate velocity.

Rava Point (Point Pleasant), the SE extremity of Rendova Island, is fringed by a narrow reef. The whole of the SW coast is backed by steep hills. The W end is bordered by a black sand beach and is sheer. Tidal currents which parallel the coast are quite strong here.

The coast is steep for 7 miles to the NE of Baniata Point, after which it is bordered by a barrier reef for no more than 2.5 miles. There are several islands on the N part of the reef, which is cut by several passes. There are several reefs in the lagoon between the barrier reef and the coast, however there is good anchorage in Port Rendova.

**8.33 Port Rendova** (8°24'S., 157°20'E.) is situated between the NW coast of the island and the islands W of it. Three main entrances lead through the barrier reef and are described below.

South Western Pass has been wire dragged to 12m to a minimum width of 411m. Vessels should enter in mid-channel on a course of 141° and when inside, turn to port into the harbor area. Exercise caution when approaching this pass from SW. Reefs at the W end of Rendova Harbor have not been surveyed, except in the vicinity of the passage.

**Note.**—A considerable portion of the harbor has been wiredragged to 12m.

Western Entrance, lying between the islands of Kuru Kuru and Lumbari has been wire dragged to 12m over a least width of 69m, and is about 229m wide between the 10m depth contour. The pass should only be used under favorable conditions of light. There are no dangers in the approach, with the exception of a drying reef lying 500m SW of Lumbari Island.

Renard Entrance, 229m wide between the reefs, has been dredged to 9m over a minimum width of 90m. A vessel must execute a sharp turn to starboard to avoid the reef lying about 0.2 mile SW of the SW end of Kokorana Island. This reef and a 5.4m shoal patch, about 0.2 mile WSW of the SE end of Bau Island, constitute the principle dangers encountered in entering the harbor through this passage, although the tidal current sets strongly across the mouth of Renard Entrance.

**Anchorage.**—Anchorage is found in Rendova Harbor in an area 3 miles in length from NE-SW, with an average width of 0.35 mile, in a dredged depth of 12m, with the exception of several isolated shoals.

The E coast of Rendova Island, between Rava Point and Buzuma Cove, consists of sand beaches, on which the sea breaks for about 4 miles; it, then follows with woods to the water's edge for 5 miles. There is good anchorage, in 31m, within the second point of the head land of Bizuma Cove, taking precautions to pass safely the sunken fringing reef off this point.

Sikuleleki (Blanche) and Renard (Baromani), two islands SE of the E end of the above-mentioned headland, have clear and deep passages between them. The coast from the Turenga River, about 6 miles N of Buzuma Cove, to the E end of Ren-

dova Harbor is steep-to and fronted by several wooded islands with passages between them.

**8.34 Tetipari Island** (Tetepare Island) (8°44'S., 157°34'E.), heavily wooded to the water's edge, is a very hilly island without any conspicuous peaks. The S coast, almost precipitous, is fringed with reefs which project more than 0.5 mile offshore in places, but is otherwise steep-to. On the reef just W of the middle of this coast is a rock, 18.2m high, with trees on it. The NE coast is cliffy and steep-to between Cape Rice and Somerville Point, the NE and N extremities, respectively, of the island. At the W extremity of the N side of the island is Waugh Bay. There is anchorage in Waugh Bay during the SE trades, in a depth of 50m, in the W part of the bay, about 0.2 mile offshore.

### **New Georgia—South Coast**

**8.35** The S coast of New Georgia, from abreast Mbelombelo to Tambaka Point, is featureless, but becomes cliffy near Port Viru. Near Mbelombelo, the coastal reef starts, enclosing Roviana Lagoon.

**Port Viru** (8°30'S., 157°44'E.), affording the only anchorage along the entire SW coast, is about 1.5 miles in length, with depths of 13 to 22m, and is landlocked without swell. The entrance, flanked by cliffs on either side, is 0.15 mile wide but fringing reefs, marked by beacons, reduce its useful width to less than 0.1 mile. Within the entrance the channel turns sharply ENE for 0.25 mile, then NNE into the harbor, and then to the anchorage. Swinging room for a vessel over 36m is limited because of the mud bank and reef off the mouths of the streams on the W side. Vessels call here to load timber.

Monro Bay, entered between Viru Harbor and Rapichana Point, is bordered by cliffs about 40m high. There is no anchorage here because of the great depths.

Reynolds Bay, entered between **Hecla Point** (8°38'S., 157°48'E.) and Rapichana Point, is bordered with a narrow coral ridge, with trees on it that reach 30m. Rapichana Point is prominent and fronted by small barrier reefs.

The Hele Islands lie on the barrier reef extending about 14 miles S from Hecla Point on New Georgia. The reef extends S for about 8 miles and then SW to Morton Island. Both N and S of the island, the reef is submerged; the N portion, known as Hele Bar,has a depth of 3.7m, while the S part has depths of 5.5 to 7.3m. East Island and South Island, at the S end of the barrier reef, are covered with large trees and are connected by an immersed reef. A white tower with a light is situated on **South Island** (8°48'5"S., 157°46'E.).

Underwater volcanic activity has taken place S of South Island, the locations of which are best seen on the chart.

**8.36** Nono Lagoon (Panga Bay) (8°43'S., 157°52'E.), formed between Vangunu Island and the Hele Islands and S of Njai Passage, is encumbered with reefs. It is the SW part of the great lagoon which surrounds Vangunu Island and is bordered on the W by the Hele Islands. Nono Lagoon is only partially examined. Naji Passage, leading from Marovo Lagoon into Nono Lagoon, has a least width of 0.3 mile, is deep, and appears clear of dangers, but this passage has only been partially examined.

Wickham Harbor (8°44'S., 158°05'E.), the area between Nggatokae and Vangunu Island, about 4.5 miles wide, is nearly spanned by a hook-shaped island, on which the tops of the trees rise to a height of about 30m. Wickham Anchorage, between the N side of the island and the SE side of Vangunu, affords anchorage, in 44m, coral and sand, midway between the hook-shaped island and the SE end of Vangumu Island. Though this anchorage has been used by small vessels, it is apparently deep, clear, and spacious.

**Caution.**—The coast between Kokoana Islet and Emma Point, 3 miles NE, is indented by several bays which are partially obstructed by reefs and shoals extending in places to 0.5 mile offshore. Extreme caution is needed when navigating in depths of less than 36m.

### Bougainville Island—Off-lying Islands and Reefs

**8.37** The **Treasury Islands** (7°25'S., 155°34'E.) consists of Mono Island and Stirling Island, separated by Blanche Channel. Mono Island, heavily wooded, rises to 355m. The N and W sides are precipitous and sheer. There is no barrier reef around the island. It is clear of hazards with the exception of a few scattered islands and detached rocks.

Sterling Island consists of raised coral but, as opposed to Mono Island, is smaller and lower. There are two sheltered bays on the N side of the island.

**Blanche Harbor** (7°24'S., 155°34'E.) is primarily a light craft anchorage since it is very narrow. This haven contains several islands, including Watson Island and Wilson Island, which lie in the central part. The best anchorage, during the Southeast Trades, is in 18.3m, sand, immediately W of a line forming the W end of Watson Island and the mouth of a stream N of it. The village of Falamai is on a promontory on the E coast of the anchorage.

The swell during the Northwest Monsoon can be felt on the W side of Watson Island, and heavy W squalls can occur. The best anchorage in this season is on the E side of Watson Island, or in the bay S of Wilson Island, but if the latter is used, beware of the rocks off the Sterling coast.

The tidal currents in Blanche Harbor set E and W are strong. **Caution.**—A shoal was reported to lie about 52 miles WSW of Sterling Island. Breakers were also reported in the vicinity of 8°41'S, 154°42'30"E.

Alu Island (Shortland Island), about 200m high and heavily wooded, is surrounded by smaller islands, islets, and numerous dangers in its vicinity. Prominent off the SE side of Alu Island are Magusaiai Island and Poporang Island, separated from Alu by a narrow beaconed channel navigable by boats.

**8.38** Shortland Harbor (7°05'S., 155°54'E.) (World Port Index No. 56950) is now operated by the Solomon Islands Defense Force as a border patrol boat base. All commercial activity has ceased. The harbor is formed by the SE coast of Shortland Island and the islands off it.

**Pirumeri Island** (7°08'S., 155°53'E.) is a coral island, cultivated except on its NW side. Battery Island lies on the reef extending N from Pirumeri Island. A beacon, in the form of a white cross, stands on the hillside close within the N extremity

of Poporang Island. Ona Island and Orlofi Island lie NE of Poporang Island. A light is shown from the E side of the reef fringing Onua Island.

**Tides—Currents.**—Tidal currents in the channels between the various islands are strong; and in the channel W of Faisi Island they attain a velocity of 2 to 3 knots.

**Depths—Limitations.**—Lofung Harbor is a deep narrow channel in the N part of Shortland Harbor. It was used by ocean-going vessels loading timber.

The passage into Lofung Harbor should not be attempted without a pilot. Entry is permitted during daylight hours only.

**Anchorage.**—Anchorage, with good shelter and holding ground, can be taken W of Faisi Island. Faisi Island is NE of the island of Magusiai. Vessels up to 3,000 grt can moor at this anchorage, which is sheltered in all seasons.

**8.39** To the W of Alu Island are a number of islands and patches. Gomai Point is the W extremity of Aloataghale Island, an island lying on a reef extending from the SW edge of Alu Island. Two groups of small detached islands, varying in height from 18 to 30m and surrounded by reefs, lie about 7 to 10 miles NW, respectively, of Gomai Point. There are deep channels E of these respective groups, either of which may be considered as the SW entrance of Bougainville Strait.

There are numerous islands and dangers lying within 1.75 miles of the NE side of Alu Island. Their names and positions are best seen on the chart. Balalac Island (Ballale Island), located 5.5 miles N of Poporang, is the S island of a number of small islands scattered about in the area between Alu Island and **Ovau** (6°48'S., 156°01'E.). Ovau, lying between the NW part of Fauro Island and Bougainville Island, is 408m high and has a deep, clear channel on either side, but the tidal currents are strong.

**Fauro Island** (6°55'S., 156°05'E.), S of Oema Island, is of volcanic origin. It is indented by many bays and dominated by several peaks; the highest of which is 587m, culminating about 5 miles from the S end. The coasts are very jagged, where there are numerous islands and reefs, particularly in the SW, extending 5 to 6 miles outward. Mania Island is the largest. It is wooded and conspicuous. Northeast of Mamia Island, about 1.7 miles, is Aoa Island. There is a good anchorage 0.2 to 0.4 mile off the E side of this island in 47m, but a rock lying 0.15 mile E of the island must be avoided.

Toma Harbor (Togha Harbor), at the S end of Fauro Island, is protected by the barrier and other reefs here and affords good anchorage, in 31 to 36m, mud and clay.

Sinasora Bay, at the S side of the promontory of **Maero Point** (East Cape) (6°55'S., 156°08'E.), the E extremity of Fauro Island, affords a snug anchorage, in 33 to 42m.

Masamasa Island and the **Piedu Islands** (6°51'S., 156°09'E.) are the two largest of a group of islands lying E of the N end of Fauro Island and N of Maero Point. About 1 mile N of Fauro Island, is Kanasata Island, with a bank extending 0.3 mile NE with 14.6m from it, and a drying reef with a remarkable column of rock 40m high extending 0.2 mile E of the island. Oema Island, 6 miles N of Kanasata, culminates in a height of 245m. Oema Atoll, 1.5 miles NE, is marked by several islands on the crown of reefs.

### **Bougainville Strait**

**8.40** Bougainville Strait, separating Choiseul Island from Bougainville Island and Shortland Island to the W, runs NNW between **Redman Island** (6°43'S., 156°24'E.) and Obeani Island, the E island of the Shortland group 14.5 miles WSW. A ridge, with depths of less than 200m, lies between these two islands. The other distinct channel with its NE-SW heading follows the coast of the SE end of Bougainville, but is not recommended.

Bougainville Strait lies on the direct route between Australia and Japan. Despite the complexity of the reefs as shown on the chart, there should be no difficulty for medium-draft vessels in maintaining a safe course through it.

**Tides—Currents.**—In the middle of the fairway through Bougainville Strait, about 8 miles NE of Maero Point (East Cape), the E extremity of Fauro Island, the tidal current attains a maximum rate of about 2 knots in a SE direction about 1 hour after LHW, and about 1.5 knots in a NW direction about 6 hours before LHW.

The currents are influenced by the shape of the sea bed, particularly where it rises steeply to the central part of the strait, and probably attain rates of up to 3 knots in the narrower channels between reefs.

**Directions**—The best route through the strait for vessels drawing 16m is on a course of 344°-164° passing midway between Else Reef and Hallpike Reef, at the S end of the passage, and Haslam Reef and Oldham Reef, at the N end of the passage, passing 6.5 miles off Obeani Island. This track is almost along the direction of the tidal current.

**Caution.**—The water near Bougainville Strait is very clear, and the light-colored sand on many of the reefs is clearly visible, even in depths of more than 15m, making the depth look much less than it really is.

### **Bougainville Island**

**8.41** Bougainville Island, the largest of the Solomon Islands and separated from Choiseul Island by Bougainville Strait, has an extensive wooded range of mountains extending the entire length of the island. The coast, though varied, also is covered with dense forest. This range in the SE part is known as the Crown Prince mountains. The Emperor Mountains are in the NW part of the island. Mount Balbi, in the NW, is the highest peak, reaching 2,591m. It is a steep pyramid with a jagged-edged active crater. Mount Taroka and Mount Bagana, in the Crown Prince Range, are 2,107m and 1,999m high, respectively, and are located about 27 miles and 58 miles NW, respectively, of Cape Friendship.



Courtesy of Jack Lockwood, U.S. Geological Survey

Caution.—The island must be approached with caution because, with the exception of the SE and S coasts, the approaches have not been surveyed completely. The W coast in particular is suspect, as there are many undetected shoals and coral heads that may exist in the vicinity of Empress Augusta Bay. The island is not accurately charted and it is questionable whether or not the actual positions may vary from the charted positions.

**Cape Friendship** (6°43'S., 155°58'E.), the E extremity of Bougainville Island, is marked by a distinctive red cliff. Rantan Island, 78m high, lies about 0.6 mile offshore, 1.5 miles N of Cape Friendship. A light is shown from a tower in position 6°41'S, 155°59'E. There is a 1m rock on a shoal 0.5 mile N of Rantan.

### **Bougainville Island—East Coast**

**8.42** The NE coast from Cape Friendship to Luluai Point, 12 miles N, is backed by the mountains with dense woods. This coastal profile continues to Kieta Harbor. There is a defined barrier reef which begins about 4 miles NE of Luluai Point. As best seen on the chart, there are reefs NNE of Rantan Island on the 200m curve. Two other small reefs lie SE of this danger; SE of Luluai Point there is a steep-to reef.

The principal islands on the barrier reef are **Otua Island** (6°27'S., 155°58'E.) and the Zeune Island.s The sea never breaks over the 12 miles of reef that stretches between these islands. Furthermore, the reefs cannot even be seen without the sun in a favorable position; also, the inshore waters of Bougainville Island have not been thoroughly surveyed. Because of these conditions, caution should prevail when navigating this part of the coast.

A light is shown from the E extremity of Otua Island.

Anchorage is available along the NE coast of Bougainville in Torau Bay, Toimonapu Bay, Orowere Bay, and Koromira Bay. Torau Bay lies N of Cape Friendship. The remaining bays are located NW of Laluai Point.

**Koromira Point** (6°22'S., 155°49'E.) is marked by a white house with a red roof flanked by a tower. This conspicuous landmark is reported to be of assistance in navigating adjacent the Zeune Islands. With good knowledge of local conditions, anchor in Koromira Bay, S of the point. About 2 miles NE of the point, anchor in 14m, 0.25 mile off a plantation. Along this stretch of coast between Koromira Point and Kieta Harbor, anchorage is also available in Reboine Bay and Toborei Bay. Anchor in Toborei Bay, in depths of 27 to 31m.

**8.43 Keita** (6°12'S., 155°40'E.) (World Port Index No. 56855) is a small port situated on the SE coast of Keita Harbor.

**Winds—Weather.**—In heavy SE winds, a heavy sea enters the harbor through the passage between Bakawari Island and the mainland S of it.

**Depths—Limitations.**—Geraro Reef, Moto Reef, and Banaru Reef are three extensive detached reefs forming a barrier reef off this stretch of coast. The seaward approach to Keita Harbor lies between Banaru Reef and Moto Reef. Several shoal patches lie off the W side of the passage. Wogoromudo Reef is charted 2.75 miles NE of a conspicuous radio mast, described below.

A wharf, with an alongside depth of 4.8m, lies 0.35 mile SE of the radio mast mentioned below. The main wharf is situated on the S side of the harbor, 0.8 mile SE of the radio mast. This facility has a least depth of 7.3m alongside, and will accommodate vessels up to 183m in length. Two berths each 58m in length, with alongside depths of 4.8m, are situated W of the main wharf.

**Aspect.**—Keita Harbor is a natural bay formed between the Keita Peninsula and Bakawari Island; the harbor is about 2.5 miles long, with an average width of 1 mile. Keita Peninsula reaches a height of 406m. At the S end of the peninsula, on a 173m high hill, stands a conspicuous radio mast; a church is situated 1.25 miles ESE of the radio mast. Arovo Island, 61m high, lies off the N end of the Keita Peninsula.

**Pilotage.**—Pilotage is compulsory and should be ordered at least 12 hours in advance, confirming 4 to 5 hours before arrival. The pilot boards about 1 mile NE of the pass through the barrier reef. Pilotage is available in daylight only.

**Regulations.**—See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia for details on regulations pertaining to vessels in the waters of Papua-New Guinea.

**Signals.**—The pilots may be contacted via VHF channel 16. **Anchorage.**—Keita Harbor provides excellent anchorage in all weathers, in a depth of about 45m.

**Directions.**—A light is shown from the W end of Moto Reef, marking the E side of the passage. A light on Banaru Reef marks the passage's W side. A light is shown from Wogoromodo Reef and from the edge of the coastal reef 0.6 mile ENE of the radio tower.

#### Anewa Bay (6°12'S., 155°33'E.)

#### World Port Index No. 56875

**8.44** The port was closed in 1989 and is not likely to reopen again in the near future. Information is retained for reference should the port re-open.

Anewa Bay was an exporter of copper concentrate. The port is entered between Kerekerina Point and Dokome Point. This is a deep water port which can accommodate any size vessel at the anchorage. Tanks and an electric power station have been built at the far end of the bay.

**Tides—Currents.**—The maximum tidal range that can be expected in Anewa Bay is about 1.5m.

**Depths—Limitations.**—A 1.65 mile wide channel leads from seaward; Kuruki Reef, Takanupei Island, and Bara Shoal border the W side of the channel, while Banaru Reef and Karikiberia Shoal lie on the channel's E side. An ore-loading wharf, situated on the N side of the bay, is 76m in length, with alongside depths of 12.1m.

**Aspect.**—Kerekerina Point stands at the end of a neck of land separating Arawa Bay from Anewa Bay. A power plant, with two chimneys showing red fixed lights, stands 1 mile W of the point. A radio tower marked by a light stands 0.2 mile W of the power station.

Lights are shown from Takanupe Island, both entrance points of the bay, and from a hill 0.3 mile W of the power station.

**Pilotage.**—Pilotage is compulsory and should be ordered at least 48 hours in advance, confirming 24 hours before arrival. If the vessel's ETA varies more than 45 minutes from its

previously radioed ETA, it should reconfirm the ETA through Rabaul Radio.

Pilots are available between 0600 and 2200; pilots board 1 mile NE of Kuruki Island.

**Regulations.**—See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia for details on regulations pertaining to vessels in the waters of Papua-New Guinea.

**Signals.**—Both the harbormaster and the pilot vessel may be contacted on VHF channels 6, 12, and 16.

**Anchorage.**—Vessels awaiting a berth should anchor 1 mile NE of the bay's NE entrance point, in charted depths of 53 to 60m, bottom quality not stated.

The NE coast of Bougainville Island, between the Kieta Peninsula and **Cape Mabiri** (5°59'S., 155°25'E.), is scattered with islands, reefs, and shoals which lie up to 6 miles offshore. There is little known of them and for the most part they are uncharted.

**Anchorage.**—The W side of the Kieta Peninsula in Kobuan Bay affords anchorage, in 16.5 to 27.4m. It is a clear sheltered bay except for a reef extending 0.3 mile N from the SW opening. Arawa Bay, W of Kobuan Bay, has a sheltered anchorage except during heavy NW winds, in 11 to 12.8m, 0.3 mile off Arawa Plantation.

Rorovana Bay affords shelter during the Southeast Trades, but is open to the NW. Anchorage is available in the SE part of the bay, but a watch must be maintained for submerged coral patches. At Mabiri Plantation, the best anchorage is reported to be in a small cove on the NW side of Cape Mabiri, though some swell exists there. Between Cape Mabiri and the barrier reef, good anchorage is possible.

**8.45** Numa Numa Harbor (5°52'S., 155°14'E.) is entered between the N end of the reef on which Casuarian Islet stands, and a point about 5 miles W of the reef's N end. Local knowledge is required for this anchorage.

Damback Island lies on the barrier reef about 11 miles NW of Numa Numa. This barrier reef extends about 10 miles SE from the island, parallel with the coastal reef. Depths of 3.7 to 5.5m extend up to 1 mile NE of the reef of Inus point.

A wreck on a reef, about 1 mile S of Inus Point, is a prominent landmark.

Close NW of Cape Nichuss, there is anchorage, in 18.3 to 73.2m, inside the reef. Beacons, in line bearing 225°, lead to the anchorage: a small timber export wharf lies 0.35 mile NW of the beacons.

Between Cape Nehuss and Teop Harbor there are no reported navigational hazards outside the barrier reef. This part of the coast has great depths. Small vessels can pass between the off-lying reefs and the coast from Cape Nehuss NW to Teopasino. The passage, which is wide and deep, leads inside of Damback Island and Toruta Island. At Teopasino, a partially-sheltered anchorage will accommodate vessels with local knowledge. Range beacons, in line bearing 177°, lead to the anchorage, in 27m, 0.15 mile offshore.

Teop Harbor indents between a tongue of reefs on which Teop Island and Horan Island lie. There is shoal water extending about 0.5 mile NE from Horan Island. There is a white stone pillar situated on an island on the W side of the harbor. Deep water extends in close to the shore, and good protection

will be found inside the harbor. Anchorage can be taken, in 34.7m, midway-between the island on which the white stone pillar stands and a river at the head of the harbor.

This anchorage requires local knowledge.

Cape l'Averdy (5°34'S., 155°05'E.) is composed of white chalk cliffs, heavily wooded, and fringed by a reef. A light is shown from the cape. About 2 miles W of the cape lies the entrance to Tinputz Harbor (Tinputs Harbor), which has considerable depths. The shores of the outer harbor are sheer with short stretches of sandy beach, whereas, the shores of the inner harbor are all sandy. Anchorage is taken close offshore because of the great depths. There is a mission station at Tinputz Harbor. A beacon stands on the coastal reef on the E side of Tinputz Harbor, 0.3 mile from its head.

Raua Harbor opens about 9.5 miles W of Cape l'Averdy. The entrance is narrow but widens inside, where two small vessels can anchor, in 55 to 64m. The head of the harbor is said to be free of reefs, but mud banks, which change position when the river is in flood, extend 45 to 90m from shore.

Baniu Bay (Beniu Bay) affords anchorage, in 35m. Depths of 33m or more are found close to shore. The SE corner of the bay is reported to be foul.

#### **Buka Island**

**8.46** Buka Island, off the NW end of Bougainville Island, is separated from it by Buka Passage. The E coast of the island affords no anchorage. This part of the coast is steep, appears sheer with a few sand beaches. Mount Bei, the island's summit, rises to a height of 500m and is located 10.5 miles N of Cape Lalahan, the S extremity of the island. The interior, except in the SW, where it is hilly, is low and undulating.

Buka Passage is available for small vessels only. The channel is clear, with a least width of about 0.1 mile. The NE approaches and the channel itself are safe. The SW approaches to the passage are divided by many islands and reefs into two main channels.

**Caution.**—Mariners are warned that mines laid during WW II still exist in some areas.

**8.47 Madehas Island** (5°28'S., 154°38'E.) commands the W approach to Buka Passage. The island rises to 137m and is fringed by a narrow reef, except at its N end, where the fringing reef and a detached reef and shoals extend out 0.45 mile. These dangers are marked by a beacon.

A light is shown from the summit of Madehas Island.

Sohano Island, 58m high, lies at the SW end of Buka Passage and is surrounded by a steep-to coral reef that dries. A pier, with an alongside depth of 3.7m, is available here, while another pier with the same alongside depth lies 0.85 mile NE of the island's NE end.

Minan Island lies on the N end of Minan Reef, which lies midway between Madehas Island and Sohano Island.

Ramun Bay, on the S side of Buka Island is entered N of Madehas Island.

**Tides—Currents.**—Tidal currents, with a velocity of about 4 knots, are reported in Buka Passage. The flood current sets to the W and the ebb current sets to the E. The survey indicated a flood current of 6 knots and an ebb current of 4.5 knots.

**Anchorage.**—Anchorage is afforded, in 18 to 26m, on the W side of Ramun Bay near the entrance. Anchorage is prohibited between Sohano and Buka Islands because of submarine cables.

**Directions.**—A vessel drawing 6m or less should pass between the S coast of Buka Island and Madehas Island, taking care to clear the reefs extending from Madehas Island, then N of Minan Island, then NE through the passage proper. When traversing the passage proper, keep to the center of the fairway until open water is reached.

The S approach channel to the passage's SW entrance requires local knowledge.

**8.48** Cape Kori (5°24'S., 154°42'E.), at the S end of the E side of Buka Island,is steep and has two caves. North of Cape Kori is Cape Hatsia, which is distinguished by a wide terrace with a narrow sandy beach. There is a village on the plateau, but most of the inhabitants live on the coast. Masasang, in the vicinity, is the pottery industry district on Buka Island. Between Cape Putputun and Cape Kotopan S of Cape Henpan, there are several large villages and sandy beaches. This part of the coast appears to be the most thickly-populated district of the island. At Hanahan Bay, entered between Cape Putputunand Cape Kotopan, the coast is low.

**Cape Hanpan** (Cape Henpan) (5°01'S., 154°37'E.), the N extremity of Buka Island, is reported to be of moderate elevation. When sighting the cape from the N, it is difficult to determine the distance off Cape Hanpan, as the trees at its N end make it appear to be closer than it really is.

**8.49** Queen Carola Harbor (5°10'S., 154°33'E.) (World Port Index No. 56852), the NW end of Buka Island, is formed by a bend in the coast and is sheltered by the barrier reef N of the Zoller Islands. There is good holding ground in moderate depths, and a good entrance for large vessels. Tanagole Bay is the NE part of the harbor, in which there are several islands. The barrier reef lies on the W side of the harbor, which partly dries and is usually marked by breakers. The entrance to Queen Carola Harbor opens between Hetau Island and Cape Rungnoun (CapeDunganon), with a passage 1.65 miles wide between the reefs, but it is divided into two deep passages by the extensive reef on which a sand cay, charted as Malulu Island, lies. The N passage is about 0.4 mile wide, with reported depths of 18.3m.

A 4.9m shoal lies E of the N entrance of the harbor, about 1 mile SSE of Cape Rungnoun.

The district surrounding the harbor is composed of extensive mangrove swamps. Hetau Island is densely populated. A 90m pier projects from the SE side of Cape Rungnoun. A conspicuous white building stands on the pier and is the only building visible from seaward. Tanagole Bay contains numerous reefs and shoals between that bay and Japaru Island. Some of the reefs and shoals are marked by beacons.

**Anchorage.**—Anchorage can be taken in Queen Carola Harbor, in 11 to 24m. Large vessels are reported to have anchored in good holding ground, N of Japaru Island and NE of Pororan Island. Small vessels usually anchor off the plantations closer inshore.

**8.50** The Zoller Islands, joined by a reef, consists of Petats Island and Jame Island (Yame Island). A passage, about 0.1 mile wide, separates the reefs extending from Matsungan Island and Petats Island. Vessels using this passage should favor the Matsungan Island side. There is a small pier on the N side of Petats Island and two on the SE end of Jame Island.

A passage, with a least depth of 18.3m, leads N of Jame Island to an anchorage off the NE side of Petats Island, with good holding ground, in 25.6m. The barrier reef extending 2 to 3 miles off the W coast of Buka Island appears defined and free of dangers.

**Sal Island** (5°26'S., 154°34'E.) is at the S end of this barrier reef. Matsungan Island and Sal Island are separated from the coast by Natunana Channel. A detached reef, awash at HW, lies midway between these two islands.

In the middle of the S entrance of Natunana Channel, about midway between Sal Island and Cape Lalahan, there are four patches, with depths of 4.3 to 9.1m. These patches extend from about 0.8 mile to 2 miles SE from the shoal end of Sal Island. Shoal depths of 5.5 to 10m lie about 2 miles NE of the N end of Sal Island.

A tidal current of 4.25 to 6 knots has been reported close SW of Sal Island.

# **Bougainville Island—West Coast**

**8.51** Caution.—Extreme caution is necessary along the W coast of the island, particularly in the vicinity of Empress Agusta Bay, as many undetected coral heads and shoals may exist here. Reefs and shoals, some of which are doubtful, lie up to 22 miles offshore.

Matchin Bay is formed by the W side of the N end of Bougainville Island. Protection for the bay is provided by Taiof Island (Toiokh Island) and Tanoara Island (Katitz Island), and numerous reefs and islands on the W. The bay itself is cluttered with islands and reefs.

Matchin Bay has not been thoroughly surveyed; charted shoals positions may be inaccurate and uncharted shoals may exist.

**Taiof Island** (5°32'S., 154°39'E.) has three distinctive densely wooded peaks, reaching from 268 to 335m high. Most of the island is fringed by reefs and mangrove swamps, but the NW coast clears with coral and sand on the foreshore, where there are a few villages.

North Channel, between Taiof Island and Madehas Island, is the principal entrance to Matchin Bay, and can be used by large vessels, but the mariner must use caution in the W approaches and be aware of the reef off the N end of Taiof Island. The S approach to the bay is through South Channel, between the S end of Tanoara Island, 204m high, and Lebau Island. This channel should not be attempted without local knowledge, as there are numerous shoals, marked and unmarked, as well as scattered reefs near the Soraken peninsula.

It is reported a clear passage, with depths up to 29.3m, leads between the N extremity of Soraken Peninsula and the reef 0.25 mile N to the anchorage in Soraken Harbor, in 27m, with good holding ground of coral and mud.

The mariner will encounter the Hilder Group when navigating S on the W coast of Bougainville Island. This group consists of five islands, each surrounded by a reef. The W island is 13.7m high to the tops of the trees, with Pachem Island (Hohn Island) 2 miles E of it. Mik Mik Island is the E island of the group.

**8.52** Between Matchim Bay and Cape Molke, the shoals and islands offshore decrease in size and number. In heavy swell conditions, any shoal with less than 9m will break, and a build-up of wave height will be apparent over any broken ground with depths under 48m.

Numerous dangers, the existence of which seem to be doubtful, are charted up to 16 miles offshore between **Cape Molke** (6°02'S., 154°49'E.) and Cape Torokina. The coastline in this area is fringed with tall scrub backed by swampland and becomes more rugged between Cape Molke and Cape Torokina.

There are several useful and conspicuous marks in the approach to Cape Torokina. Mount Bagana and Mount Balbi are prominent from this coast. A white square patch of rock on a vertical cliff, 10 miles NNW of the cape, and the angular fall of a flat-topped ridge, about 10 miles NNE of the cape, are also conspicuous. This declivity forms a cut in the skyline and is said to be identifiable from a greater distance than either Mount Bagana or Mount Balbi because of the cloud cover over these mountains. A small jetty is situated close W of a prominent radio tower standing on Cape Torokina.

Puruata Island lies about 0.5 mile W of Cape Torokina.

**Anchorage.**—Anchorage can be taken W of Puruata Island in good holding ground, sand bottom, but a heavy swell often sets in from the SE. Caution is urged when approaching this anchorage as dangers, not shown on the chart, may exist.

Empress Augusta Bay is entered between **Motupena Point** (6°31'S., 155°09'E.) and Cape Torokina. Its approaches are scattered with numerous dangers reaching out for 22 miles to the W of Motupena Point and for 18 miles to the WSW of Cape Torokina. It is reported there could be other dangers not yet discovered in the approaches. Lothian Shoals, on which the sea breaks, lie about 13 miles SW of Cape Torokina. Empress Augusta Bay is fringed with mangroves, which decrease in breadth as the vessel comes up on the N part of the bay. The background is formed by imposing mountains, among which to the N is Mount Bagana, an active volcano.

**Caution.**—It is probable that more foul ground than is charted exists off the SW coast of Bougainville Island. Care is necessary when navigating in this vicinity.

**8.53** The coast trending SE for about 40 miles from Motupena Point to Moila Point is low and fronted at a distance of about 10 miles by a broken barrier reef with some islands on it in places. There are depths over 200m with no bottom, 1 mile outside this barrier. Numerous steep-to coral patches, best seen on the chart, have been reported to lie from 10 to 15 miles off this coastline.

A detached reef, on which **Antarara Island** (6°56'S., 155°23'E.) and Alungokaku Island, lie presents an off-lying danger, 19 miles W of Moila Point, and 9 miles offshore. Discolored water, best seen on the chart, was reported in several patches, between Antarara Island and Kabukeal Island. This report is more than 50 years old. A coral reef, awash, lies about 18 miles W of Antarara Island and the same distance offshore. A reef lies 16 miles WNW of Antarara Island and 12 miles offshore, and reefs were reported to lie from 7 to 12.5 miles NW of the same island. Breakers were reported about 9 miles S of Motupena Point.

**8.54** The coast between Moila Point and Pupukuna Point, forming the W side of Bougainville Strait, is in large part low, and is bordered by white sand beaches cut by rivers. Inland, the land rises gradually. There are several villages along the coast, and Buin, 6.3 miles NNE of Moila Point, has a mission and is a commercial center.

The S end of Bougainville Island is reported to be the densely-populated part of the island.

Erventa Island and Popotala Island lie off this part of the coast and in the dangerous approaches to Bougainville Island. A 3.4m patch lies about 0.3 mile SSW of Erventa Island and a sunken rock lies about 0.4 mile SSE of Popotala Island. A 11.3m patch lies about 0.6 mile NNE of Popotala Island.

**Caution.**—A dangerous wreck lies sunk 2.5 miles SW of Erventa Island, the position of which is approximate. A second wreck lies about 1 mile offshore, about 4.8 miles NE of Moila Point; several stranded wrecks lie close of the coast NW of Pupukuna Point.

**8.55** Tonolei Harbor (6°47'S., 155°53'E.) opens between Pupukuna Point and East Point. It is backed by high, denselywooded hills, particularly on the E side. Sand Island, on a coral patch on the E side of the entrance is 6m high. It is generally passed on the W side, where there is ample room. A 1 mile channel, marked and dredged, leads to Tonolei Harbor.

**Anchorage.**—Anchorage, with good shelter from the prevailing winds, can be found anywhere in Port Tonolei, in 25 to 36m, sand and mud.

East Point (6°49'S., 155°55'E.) is marked by a light.